SITE SOILS CHARACTERIZATION AND CLEANUP REPORT

MILES SAND & GRAVEL COMPANY
1201 M Street SE
AUBURN, WA 98002

Prepared for:

Miles Sand & Gravel
400 Valley Avenue NE
Puyallup, WA 98372

Prepared by:

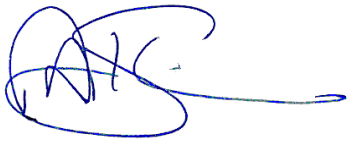
Blue Sage Environmental, Inc.
P.O. Box 6738
Kennewick, WA 99336

October 13, 2014

STATEMENT OF WARRANTY

This report has been prepared for the sole use of Miles Sand & Gravel Company, their management, and their designated representatives. Blue Sage Environmental, Inc. (BSE) of Kennewick, Washington managed sample gathering, analytical methods, data review, and project reports as required by the Washington State Department of Ecology, Toxics Cleanup Program. Mr. Alexander H. Koch, environmental projects manager for BSE, directed all on-site technical services.

The analysis and conclusions in this report are based on site conditions, as they existed during the length of this investigation. Blue Sage Environmental, Inc. makes no warranty to the environmental condition of this property or to any bordering property or properties. BSE has solely reported findings from specific actions taken as a result of performing a site soil characterization following a cleanup in accordance with Washington State Department of Ecology guidelines and regulations. No other warranty or representation, express or implied, is made.



_____ October 13, 2014

Signature Date

Alexander H. Koch
Washington State Site Assessment Certified
ICC No. 1059552-U7
Expiration date July 19, 2015

INTRODUCTION

SITE NAME AND LOCATION:
Miles Sand & Gravel Company
1201 M Street SE
Auburn, WA 98002 (*Figures 1&2*)
King County Parcel: 1921059082
Ecology Facility Site ID #87547247

Legal Description:
E 1000.00 FT OF W 1030.00 FT OF N 330.80 FT OF FOLG GLS 9 & 10 IN NE 1/4 & ABANDONED RIVER BED LY THIN

SITE OWNER:
Muckleshoot Indian Tribe
39015 172nd SE
Auburn, WA 98092
(253) 876-3136

PROJECT PURPOSE:
Miles Sand & Gravel Company (MS&G) has operated the Auburn pit and concrete batch plant since the 1940s. In October 2009, they sold this property to the Muckleshoot Indian Tribe. MS&G leased back the property for a five year period which expires December 31, 2014. At the end of the lease, all structures relating to the operation of the sand and gravel and concrete batch plant are to be removed. This includes the Underground Storage Tank (UST) system that MS&G uses to refuel their equipment.

UST HISTORY:
Three USTs were installed at the subject property in 1978. They are described as follows in Ecology's UST Tank Data Summary (*Appendix A*):

Tank ID Name	Capacity (gallons)	Size	Substance stored
E	10,000	95"dia x 28'	Unleaded Gasoline
M	10,000	95"dia x 28'	Diesel
W	20,000	119"dia x 35'	Diesel

The USTs were positioned end to end (*Figure 3*). Each UST had a designated pump that was attached directly over the top of each tank (*Photos 1*). All piping for this system was located on top of each UST. This included the fill tube, vent piping, and fuel dispenser pump. The interior of each UST was lined with an epoxy coating in 1998 as a system upgrade.

The tops of the USTs were covered with a concrete pad. The fuel dispensing systems were on this pad. In 1998, cement skirts were added along both sides of the UST cover pad. Prior to that time, the site equipment parked on gravel during refueling.

SCOPE OF WORK:

- Remove existing USTs and associated equipment;
- Excavate any contaminated soils;
- Sample excavation sidewalls and floor for soils characterization;
- Stockpile and treat any contaminated soils on the subject property.

SAMPLE NOMENCLATURE:

Samples were numbered sequentially and preceded by the identifier, "MSG" for Miles Sand & Gravel Company, D or G (diesel or gasoline), and size of UST (10k or 20k). Stockpile samples were numbered with the identifier, "MSG", "SP" (stockpile), and numbered sequentially. Each chain of custody form has the date of sampling included as an identifier.

ANALYTICAL PARAMETERS:

Soil samples were analyzed for Diesel Range Organics (DRO) and Gasoline Range Organics as specified in MTCA Table 830-1, Required Testing for Petroleum Releases.

QUALITY ASSURANCE/QUALITY CONTROL:

Soil samples were analyzed for their individual analytes by the ESN-Northwest laboratory in Olympia, WA. The laboratory QA/QC procedures followed standard methods accepted by EPA, listed in SW-846. Laboratory QA/QC procedures included laboratory surrogate recoveries. The holding times (extraction and analysis) for all samples were within the required limits. All QA/QC for soil samples meets or exceed EPA recommended guidance. The soil samples are considered acceptable quality and usable for evaluation of the environmental conditions at the site.

SITE GEOLOGY:

The subject property is located in the Duwamish Valley, south of the Green River. A large mudflow covers the drift plain forming a broad, fertile area. The gravel pit is located against the east side of the valley wall. Underlying soils consist of flood deposited pebble-cobble-gravel and sand mixture (*Luzier, 1969*).

There is a potable-water well located on the subject property. It was completed in 1969. The well log indicates a static water level at 49 feet below the surface. State of Washington well log is attached (*Appendix B*).

UST DECOMMISSIONING:

The UST system was dismantled on September 8, 2014. Each UST was pumped empty of remaining fuel by Don Small & Sons Oil Company of Auburn. The concrete pad was removed from over the USTs exposing the tops of each tank. All pumps, vent lines and

fill tubes were removed. The USTs had been bedded in pea gravel (*Photos 2*). This was removed from along the south side of the USTs. On September 9, 2014, the USTs were triple rinsed by Marine Vacuum Service of Seattle (*Appendix C*). Each UST was inerted using dry ice.

On September 9, 2014, the three USTs were removed from the ground (*Figure 4*). A Valley Regional Fire Authority inspector was present during the day. Following removal of the USTs (*Photos 3*) remaining pea gravel was removed where it could be accessed by the tracked-excavator and stockpiled on-site (*Photos 4*). This product exhibited no odor, or discoloration associated with either diesel fuel or gasoline. A sand and gravel mixture was removed from around the 10,000 and 20,000 gallon diesel USTs. It was stockpiled on-site. Volume estimated to be just over 100 cubic yards.

The USTs were transported to the back of the pit, turned on their sides, and left to vent and dry out. MS&G is going to move them to another of their locations for future use.

Site Sampling – September 10, 2014

The USTs had been bedded in pea gravel. Releases would have migrated quickly to the bottom of each tank. Soil samples were obtained from the floor of the excavation from under all three USTs (*Figures 5, 6 & 7)*). Depth of samples from under the UST is approximate, based on depth each UST was resting on native soil. Soil samples were also obtained from the stockpiled material following excavation of the USTs.

Sample Number	Depth (ft)	Location
MSG-D20-1	12+	Floor, east end of UST
MSG-D20-2	12+	Floor, center of UST
MSG-D20-3	12+	Floor, west end of UST
MSD-D10-1	10+	Floor, east end of UST
MSG-D10-2	10+	Floor, center of UST
MSG-D10-3	10+	Floor, west end of UST
MSG-G10-1	12+	Floor, east end of UST
MSG-G10-2	12+	Floor, center of UST
MSG-G10-3	12+	Floor, west end of UST

A copy of the ESN Northwest Laboratory report, dated September 16, 2014 is attached (*Appendix D*). A summary of these results is attached in tabular form (*Table 1*). The sample under the east end of the 10,000 gallon Diesel UST reported the concentration of diesel (5,500 mg/kg) above the MTCA Method A cleanup level for soil (2000 mg/kg) for Diesel Range Organics (DRO). Concentrations from the floor samples under the 20,000 gallon Diesel UST were reported below the MTCA Method A Cleanup Level for Diesel Range Organics (DRO). Concentrations from under the 10,000 gallon gasoline UST reported not detected for Gasoline Range Organics (GRO). The five stockpile samples had one result above the MTCA Cleanup Level for Diesel.

Additional excavation was required from around the 10,000 gallon Diesel UST after review of the analytical results. The open excavations under the 20,000 gallon Diesel and 10,000 gallon Unleaded Gasoline USTs were filled with clean pit run (sand and gravel mixture).

Site Remediation – September 12, 2014
On September 12, 2014, addition excavation was completed by removal of soil from around the location of the 10,000 gallon Diesel UST. This activity lowered the floor of the excavation from 12ft to approximately 25ft below the surface. The original north wall was moved back approximately 5 feet (*Photos 5*). Approximately 174 cubic yards of excavated soil was stockpiled on the property.

Site Sampling – September 12, 2014
Soil samples were obtained from the sidewalls and floor of the excavation (*Figure 8*). Depth of floor samples is at least the depth reported. The bucket of the tracked excavator was used to obtain each sample. Scooping action of the excavator would add to the depth to the floor of 25 feet. Analysis for BTEX was suspended following a review of the results from the September 10th sampling activity. All samples results for BTEX in the excavation floor and stockpile samples reported concentrations as not detected.

Sample Number	Depth (ft)	Location
D10 - Floor E	26+	Floor, east end
D10 – Floor W	26+	Floor, west end
N Wall - East	20	North wall, east end
N Wall - Center	20	North wall, center
N Wall - West	20	North wall, west end
S Wall - East	20	South wall, east end
S Wall - West	20	South wall, west end

Concentrations of diesel above the MTCA Method A Cleanup Level were present in the north wall center and east end at a depth of approximately 20 feet below the surface. The floor of the excavation at a depth of approximately 25 feet did not report diesel concentrations above the MTCA Method A Cleanup Level. Sheen testing was used to check for the presence of diesel prior to sampling from specific locations. There was no petroleum odor present in the sidewall soils. The remaining petroleum hydrocarbons were weathered and appeared to have been in the soil for an extended period of time.

A copy of the ESN Northwest Laboratory report, dated September 16, 2014 is attached (*Appendix E*). A summary of these results is attached in tabular form (*Table 2*).

Site Remediation – September 16, 2014
Excavation resumed on September 16th around the area where the 10,000 gallon Diesel UST had been located. Elevated levels of diesel remained on the north wall after the September 12, 2014 remediation work. The north wall, east wall and south walls were

moved back several feet (*Photos 6*). Approximately 140 cubic yards of soil was removed from the area and stockpiled on the property.

Site Sampling – September 16, 2014
Soil samples were obtained from the north, east and south sidewalls of the excavation. Depth was around 20 feet. This depth was where highest concentrations of diesel had been reported from previous soil sampling.

Sample Number	Depth (ft)	Location
N Wall – East2	20	North wall, east end
N Wall – Ctr 2	20	North wall, center
East Wall-S End	20	East wall, se corner
S Wall - Ctr	20	South wall, center
S Wall – W End	20	South wall, west end

All samples reported diesel concentrations as not detected. A copy of the ESN Northwest Laboratory report, dated September 23, 2014 is attached (*Appendix F*). A summary of these results is attached in tabular form (*Table 3*).

Following receiving results from the September 16, 2014 sampling activity, an aqueous solution of surfactant and nitrogen (Urea) was applied across the open excavation area. The open excavation has been backfilled with pit run (sand and gravel mixture) from the MS&G operation.

STOCKPILE REMEDIATION:
Soil from excavation during removal of the three USTs on September 10th was laid out in a long pile, about two feet deep. Soils from excavation on September 12th and 16th were laid out in similar long piles. On September 17th, the piles were turned. An aqueous solution of surfactant and nitrogen (Urea) was applied. The piles were turned several more times prior to sampling on September 24, 2014.

Treatment of stockpiled soils by the addition of nutrients (aqueous solution) and the turning of the piles (oxygenation) lowered concentrations of diesel quickly. The weather was cooperative as daytime temperatures were in the 70s during this period with sunny days. A copy of the ESN Northwest Laboratory report, dated September 30, 2014 is attached (*Appendix G*). Results are summarized in tabular form (*Table 4*).

SUMMARY OF REMEDIATION ACTIVITIES:
Following removal of the three USTs, concentrations of diesel above the MTCA Method A Cleanup Level for Soil were detected below the 10,000 gallon Diesel UST. Native soil around and underneath the UST was best described as a pebble-cobble-gravel and sand mixture (*Photo 7*). This stratum allowed for the horizontal and vertical movement of diesel from spills that occurred over the years the UST was in operation. Remediation by the excavation of contaminated soils from around this UST was successful.

Concentrations of diesel from sidewalls and floor of the excavated area were below the MTCA Method A Cleanup Level for Soils of 2,000 mg/kg. Sample analysis from beneath the 20,000 gallon Diesel and 10,000 Gasoline USTs did not report elevated concentrations above their respective MTCA Cleanup Levels. Groundwater was not encountered in the excavations.

Treatment of stockpiles soils with elevated concentrations of diesel was successful. Following the addition of a nitrogen-nutrient source to the stockpiled soils, concentrations of diesel were below the MTCA Method A Cleanup Level. This material will be used on-site as fill.

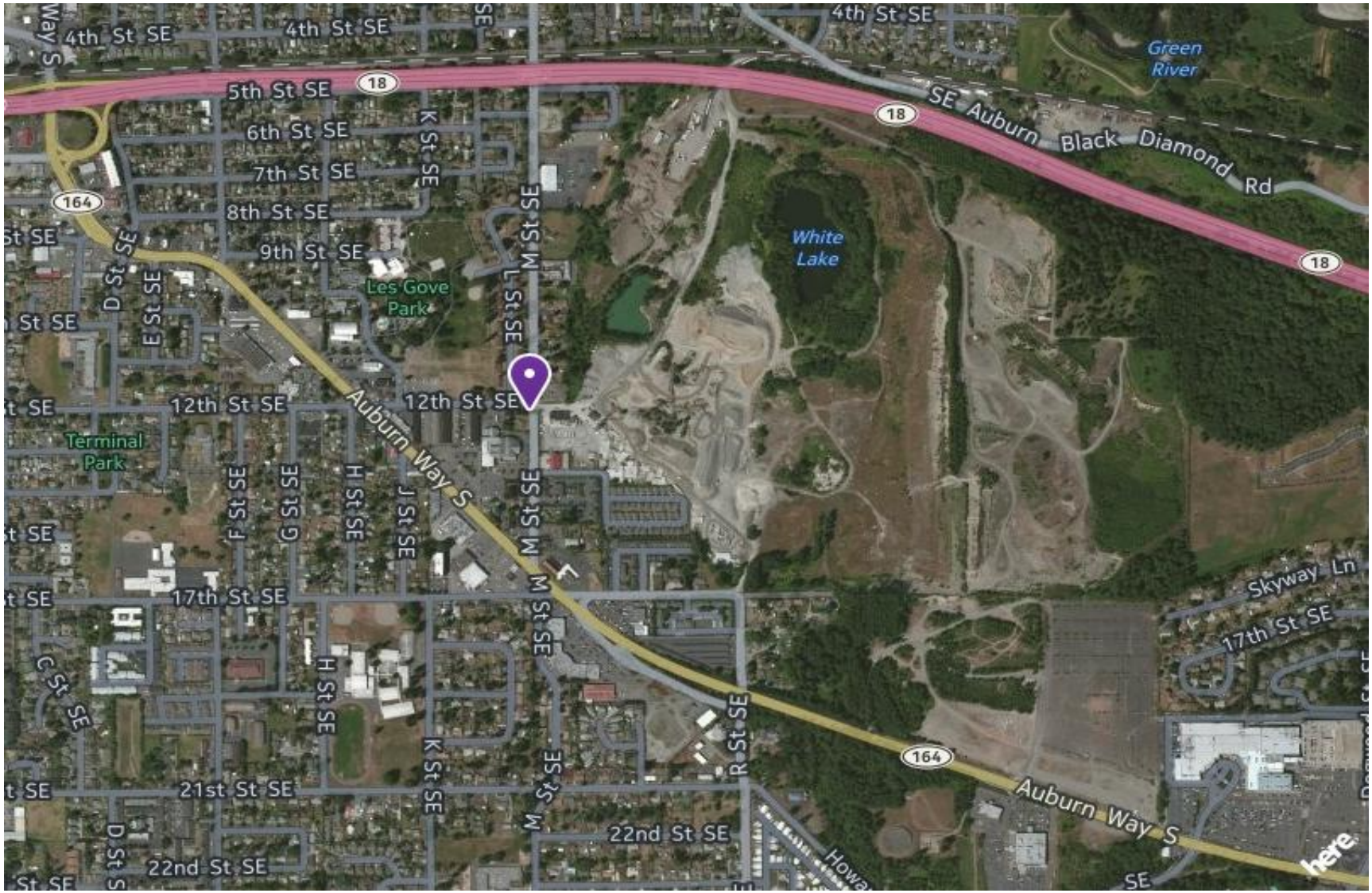
REFERENCE LIST

Luzier, J.E., 1969, *Geology and Groundwater Resources of Southwestern King County, Washington*, Department of Water Resources, Water Supply Bulletin No. 28, Olympia, Washington.

Washington Department of Ecology, *Model Toxics Control Act Cleanup Regulation*, Chapter 173-340 WAC, Revised November 2007.

Washington State Department of Ecology, *Guidance for Site Checks and Site Assessments for Underground Storage Tanks*, February 1991 (Revised April 2003).

FIGURES



BLUE SAGE ENVIRONMENTAL, INC. KENNEWICK, WA	TITLE	Miles Sand & Gravel 1201 M Street SE Auburn, WA	SCALE: as shown DWN: DATE: Oct 3, 2014	DWG. NO. **Figure 1**

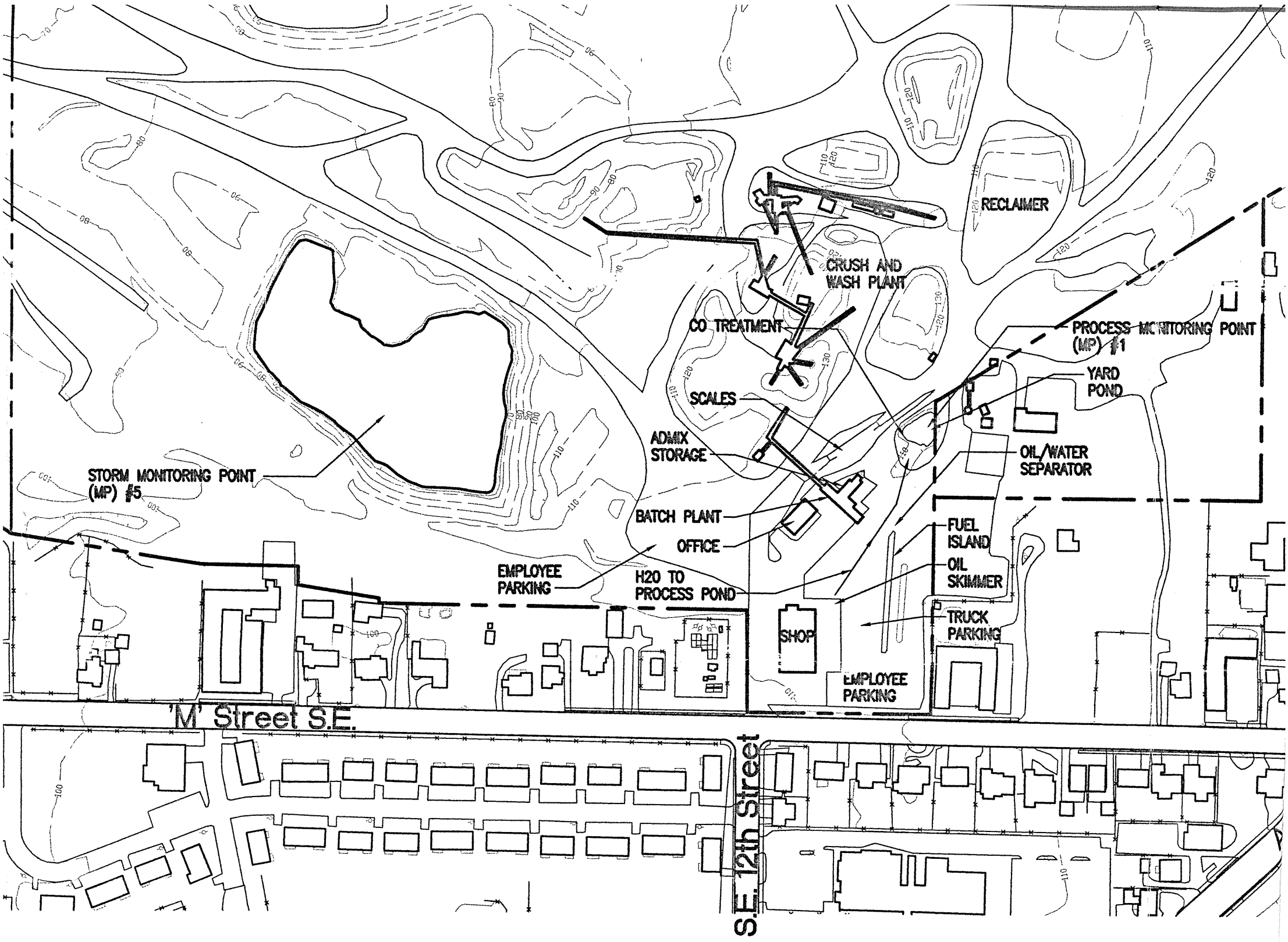


Figure 2
Site Layout Drawing

NPDES EXHIBIT MAP

1" = 200'

NORTH

Site ID: 10786
Site Tag #: A4121
Facility Site ID: 87547247

MILES SAND & GRAVEL
1201 M ST SE
AUBURN, WA 98002-6707
Phone #: (253) 833-3705

UBI: 171-004-760 001 0002

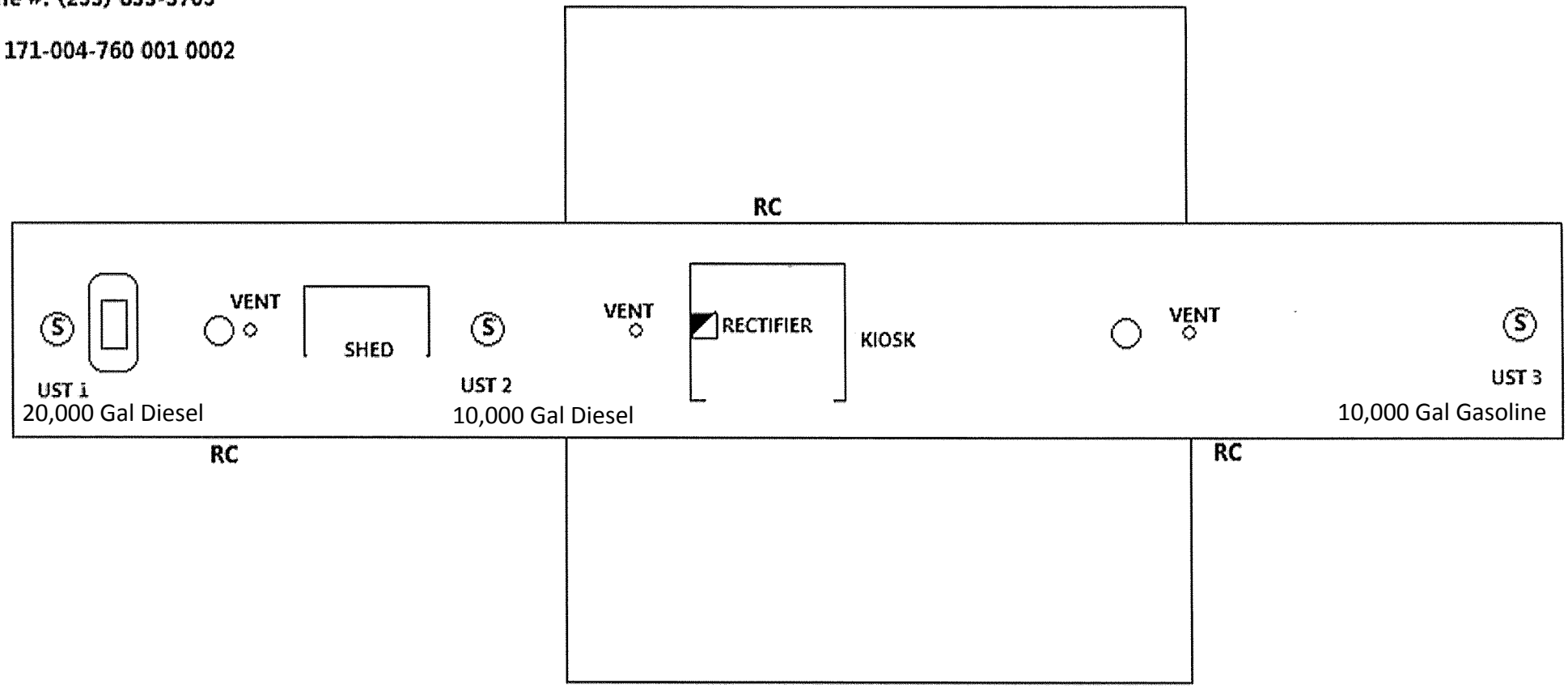
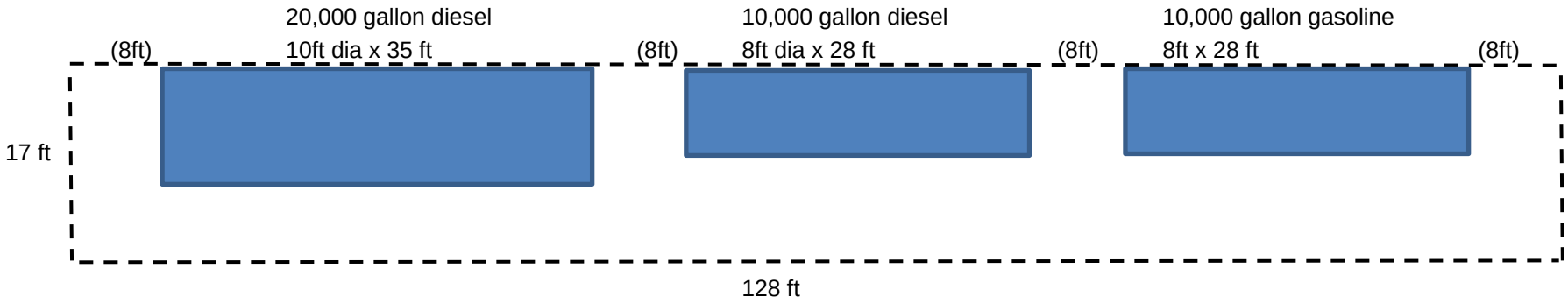
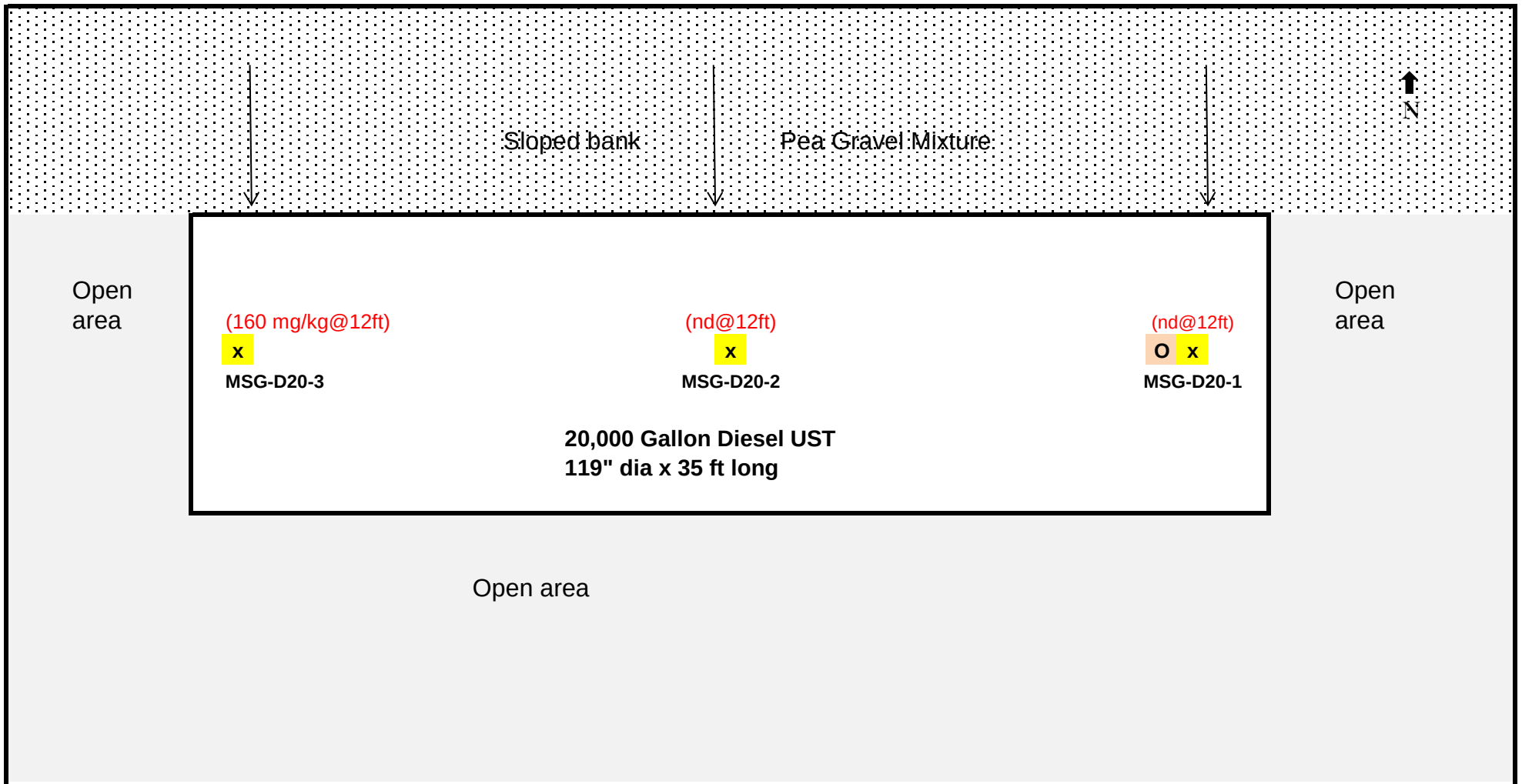


Figure 3
UST Layout

S = STRUCTURE CONTACT
RC = REFERENCE CELL LOCATION
REM = REMOTE READING



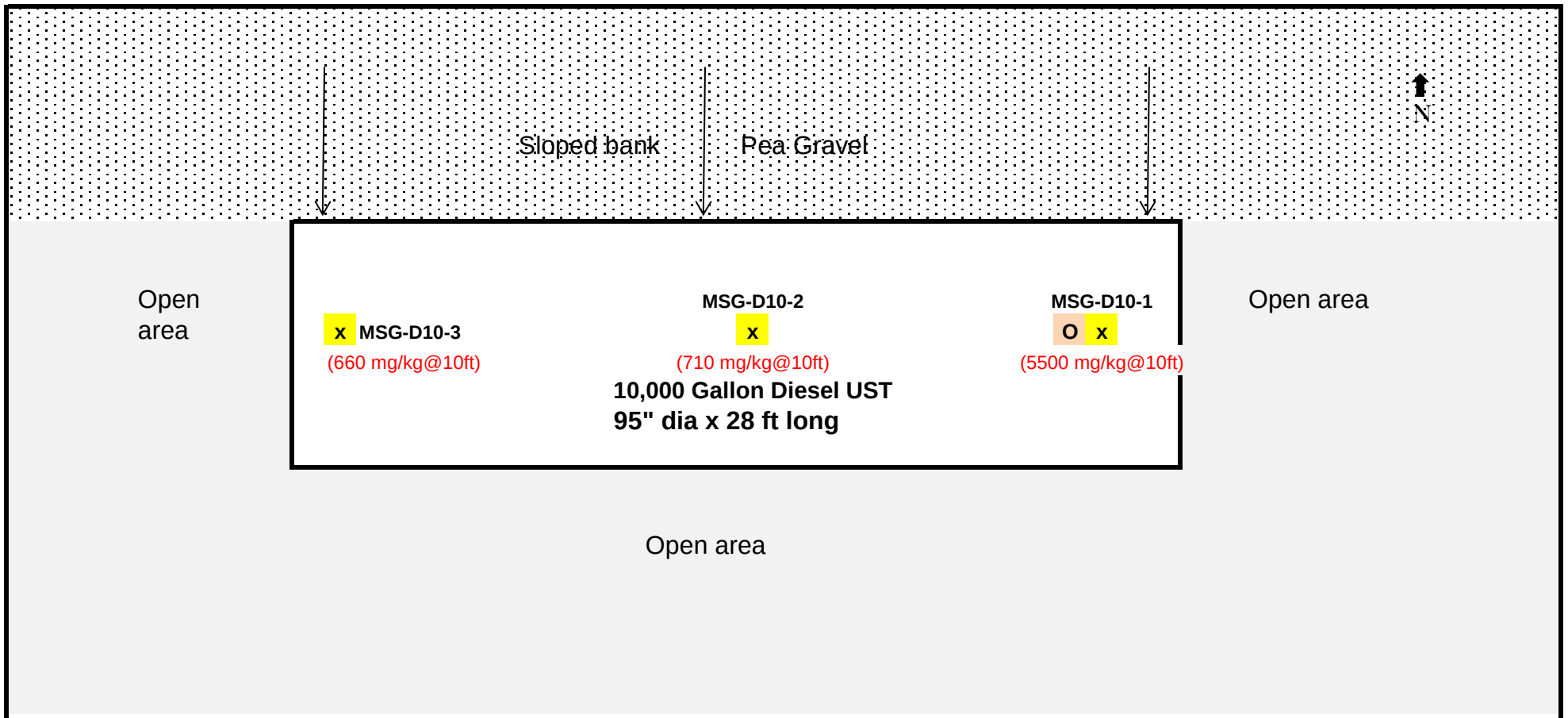
BLUE SAGE ENVIRONMENTAL, INC. KENNEWICK, WA	TITLE Miles Sand & Gravel UST layout when uncovered 9/10/2014	SCALE: as shown DWN: A Koch DATE: 10/3/14	DWG. NO. **Figure 4**



Sample date: September 10, 2014
Depth to floor of excavation - 12 feet

Legend
x Sample Location
O Fill Tube Opening
Excvated area

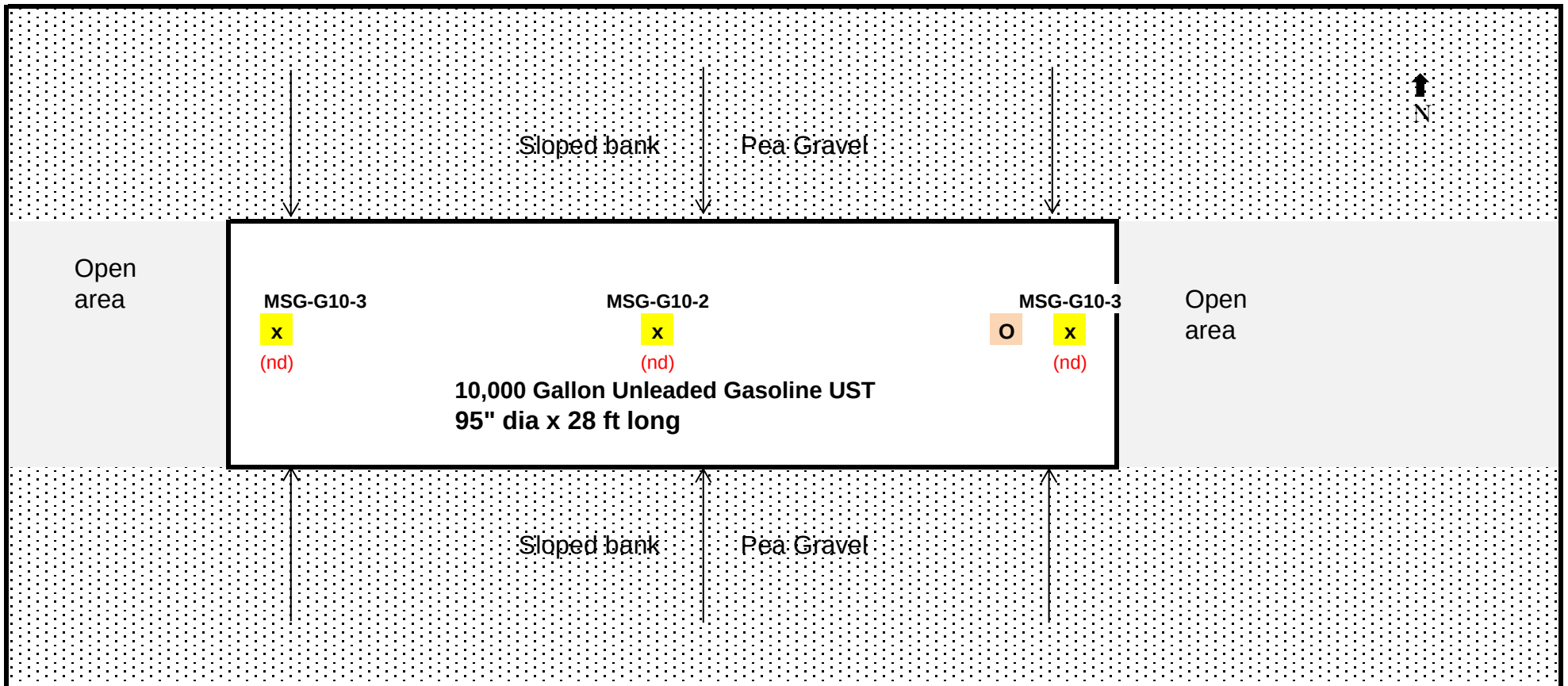
BLUE SAGE ENVIRONMENTAL, INC. KENNEWICK, WA	TITLE Miles Sand & Gravel 1201 M Street SE Auburn, WA	SCALE: as shown DWN: DATE: Oct 3, 2014	DWG. NO. **Figure 5**



Sample date: September 10, 2014
Depth to floor of excavation - 10 feet

Legend
x Sample Location
O Fill Tube Opening
Excavated area

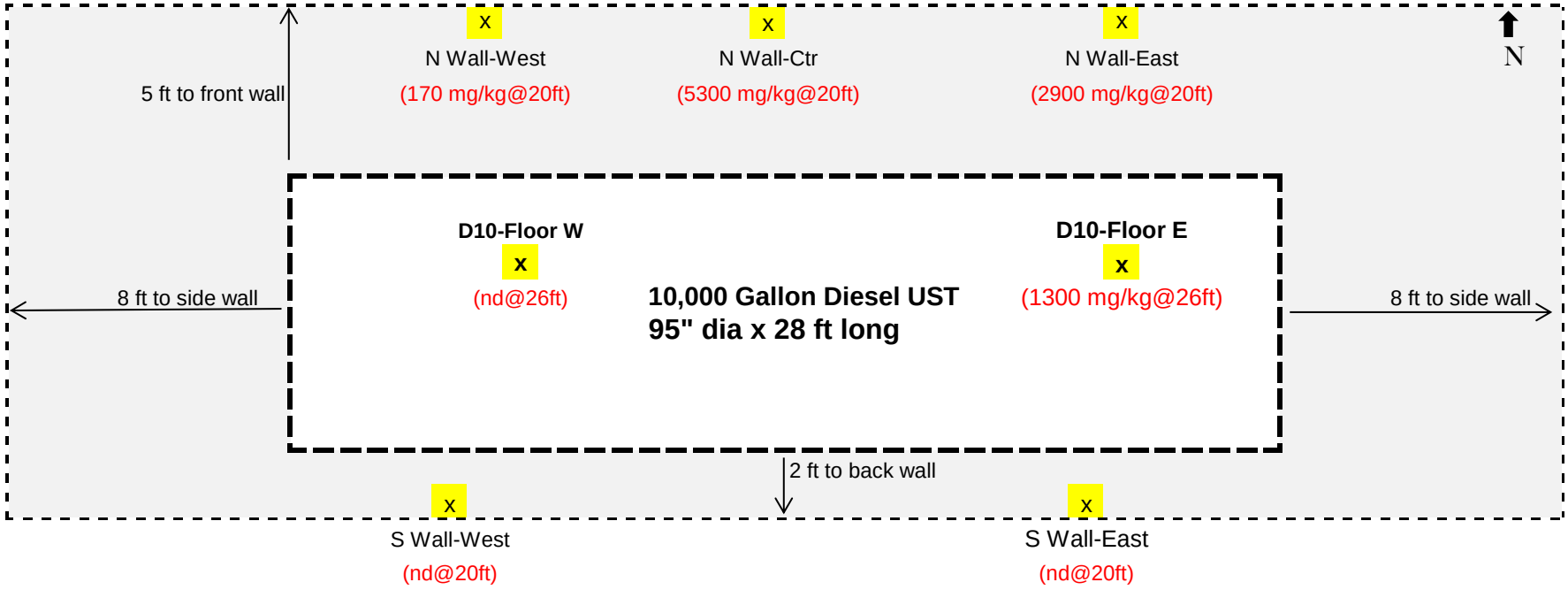
BLUE SAGE ENVIRONMENTAL, INC. KENNEWICK, WA	TITLE Miles Sand & Gravel 1201 M Street SE Auburn, WA	SCALE: as shown DWN: DATE: Oct 3, 2014	DWG. NO. **Figure 6**



Sample date: September 10, 2014
Depth to floor of excavation - 12 feet

Legend
x Sample Location
O Fill Tube Opening

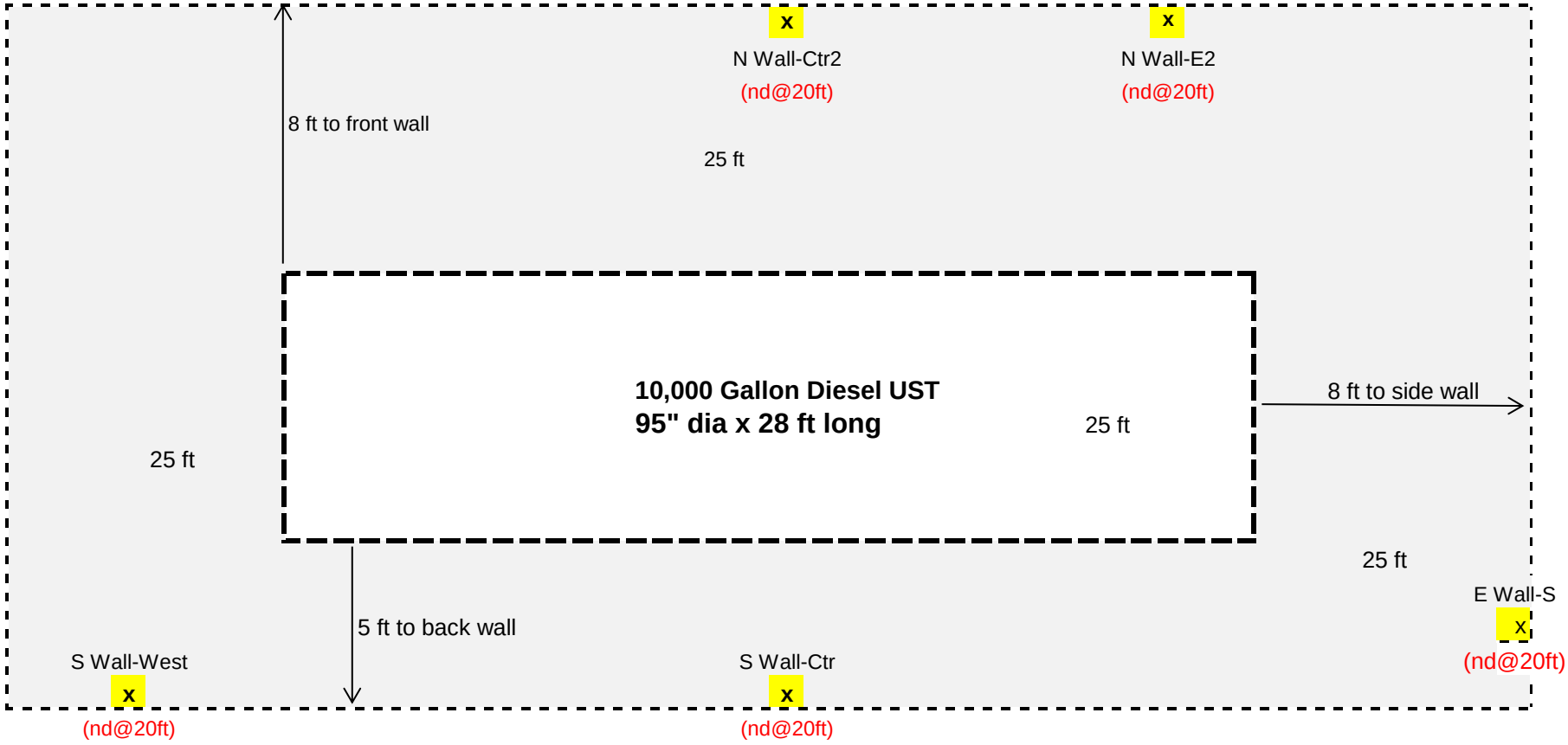
BLUE SAGE ENVIRONMENTAL, INC. KENNEWICK, WA	TITLE Miles Sand & Gravel 1201 M Street SE Auburn, WA	SCALE: as shown DWN: DATE: Oct 3, 2014	DWG. NO. **Figure 7**



Sample date: September 12, 2014
Depth to floor of excavation - 25 feet

Legend
x Sample Location
Excavated area

BLUE SAGE ENVIRONMENTAL, INC. KENNEWICK, WA	TITLE Miles Sand & Gravel 1201 M Street SE Auburn, WA	SCALE: as shown DWN: DATE: Oct 3, 2014	DWG. NO. **Figure 8**



Sample date: September 16, 2014
Depth to floor of excavation - 25 feet

Legend
x Sample Location
Excavated area

BLUE SAGE ENVIRONMENTAL, INC. KENNEWICK, WA	TITLE Miles Sand & Gravel 1201 M Street SE Auburn, WA	SCALE: as shown DWN: DATE: Oct 3, 2014	DWG. NO. **Figure 9**

TABLES

TABLE 1
Soil Analysis
Miles Sand & Gravel Company
Auburn, Washington

Sample Date	Sample Number	Location	Depth (ft.)	Units	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Benzene	Toluene	Ethylbenzene	Xylenes	Total Lead
9/10/14	MSG-D20-1	20k diesel	12+	mg/kg	-	nd	nd	nd	nd	nd	-
9/10/14	MSG-D20-2	20k diesel	12+	mg/kg	-	nd	nd	nd	nd	nd	-
9/10/14	MSG-D20-3	20k diesel	12+	mg/kg	-	**160**	nd	nd	nd	nd	-
9/10/14	MSG-D10-1	10k diesel	10+	mg/kg	-	**5500**	nd	nd	nd	nd	-
9/10/14	MSG-D10-2	10k diesel	10+	mg/kg	-	**710**	nd	nd	nd	nd	-
9/10/14	MSG-D10-3	10k diesel	10+	mg/kg	-	**660**	nd	nd	nd	nd	-
9/10/14	MSG-G10-1	10k gas	12+	mg/kg	nd	**-**	nd	nd	nd	nd	-
9/10/14	MSG-G10-2	10k gas	12+	mg/kg	nd	**-**	nd	nd	nd	nd	-
9/10/14	MSG-G10-3	10k gas	12+	mg/kg	nd	**-**	nd	nd	nd	nd	-

Notes:

nd	Not detected at the listed detection limits
-	Not analyzed
710	Bold number(s) indicate contamination present
5500	Bold and shaded number(s) indicate contamination above MTCA Method A cleanup level for soils

Blue Sage Environmental, Inc.
Kennewick, WA
(509) 947-4059

TABLE 2
Soil Analysis
Miles Sand & Gravel Company
Auburn, Washington

Sample Date	Sample Number	Location	Depth (ft.)	Units	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Benzene	Toluene	Ethylbenzene	Xylenes
9/12/14	D10-Floor E	10k diesel	26	mg/kg	-	**1300**	-	-	-	-
9/12/14	D10-Floor W	10k diesel	26	mg/kg	-	nd	-	-	-	-
9/12/14	N Wall-East	10k diesel	20	mg/kg	-	**2900**	-	-	-	-
9/12/14	N Wall-Ctr	10k diesel	20	mg/kg	-	**5300**	-	-	-	-
9/12/14	N Wall-West	10k diesel	20	mg/kg	-	**170**	-	-	-	-
9/12/14	S Wall-East	10k diesel	20	mg/kg	-	nd	-	-	-	-
9/12/14	S Wall-West	10k diesel	20	mg/kg	-	nd	-	-	-	-

Notes:

nd	Not detected at the listed detection limits
-	Not analyzed
710	Bold number(s) indicate contamination present
5500	Bold and shaded number(s) indicate contamination above MTCA Method A cleanup level for soils

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TABLE 3
Soil Analysis
Miles Sand & Gravel Company
Auburn, Washington

Sample Date	Sample Number	Location	Depth (ft.)	Units	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Benzene	Toluene	Ethylbenzene	Xylenes
9/16/14	N Wall-E2	10k diesel	20	mg/kg	-	nd	-	-	-	-
9/16/14	N Wall-Ctr2	10k diesel	20	mg/kg	-	nd	-	-	-	-
9/16/14	E Wall-S End	10k diesel	20	mg/kg	-	nd	-	-	-	-
9/16/14	S Wall-Ctr	10k diesel	20	mg/kg	-	nd	-	-	-	-
9/16/14	S Wall-West	10k diesel	20	mg/kg	-	nd	-	-	-	-

Notes:

nd	Not detected at the listed detection limits
-	Not analyzed
710	Bold number(s) indicate contamination present
5500	Bold and shaded number(s) indicate contamination above MTCA Method A cleanup level for soils

Blue Sage Environmental, Inc.
Kennewick, WA
(509) 947-4059

TABLE 4
Soil Analysis
Miles Sand & Gravel Company
Auburn, Washington

Sample Date	Sample Number	Location	Depth (ft.)	Units	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Benzene	Toluene	Ethylbenzene	Xylenes	
9/10/14	MSG-SP1	Stockpile	1	mg/kg	nd	**180**	nd	nd	nd	nd	Stockpiled soils from 9/10/14 excavation
9/10/14	MSG-SP2	Stockpile	1	mg/kg	nd	**1200**	nd	nd	nd	nd	Stockpiled soils from 9/10/14 excavation
9/10/14	MSG-SP3	Stockpile	1	mg/kg	nd	**2200**	nd	nd	nd	nd	Stockpiled soils from 9/10/14 excavation
9/10/14	MSG-SP4	Stockpile	1	mg/kg	nd	**2000**	nd	nd	nd	nd	Stockpiled soils from 9/10/14 excavation
9/10/14	MSG-SP5	Stockpile	1	mg/kg	nd	**270**	nd	nd	nd	nd	Stockpiled soils from 9/10/14 excavation
9/24/14	MSG-SP9	Stockpile	1	mg/kg	-	**130**	-	-	-	-	Original stockpile - 9/10/14
9/24/14	MSG-SP10	Stockpile	1	mg/kg	-	**110**	-	-	-	-	Original stockpile - 9/10/14
9/24/14	MSG-SP11	Stockpile	1	mg/kg	-	**960**	-	-	-	-	Original stockpile - 9/10/14
9/24/14	MSG-SP6	Stockpile	1	mg/kg	-	**470**	-	-	-	-	Stockpile 9/12&16/14, 10,000 gallon diesel
9/24/14	MSG-SP7	Stockpile	1	mg/kg	-	nd	-	-	-	-	Stockpile 9/12&16/14, 10,000 gallon diesel
9/24/14	MSG-SP8	Stockpile	1	mg/kg	-	nd	-	-	-	-	Stockpile 9/12&16/14, 10,000 gallon diesel
9/24/14	MSG-SP12	Stockpile	1	mg/kg	-	nd	-	-	-	-	Stockpile 9/12&16/14, 10,000 gallon diesel

Notes:

nd	Not detected at the listed detection limits
-	Not analyzed
1200	Bold number(s) indicate contamination present
2200	Bold and shaded number(s) indicate contamination above MTCA Method A cleanup level for soils

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(509) 947-4059

PHOTOGRAPHS

View of Unleaded Gas pump and Diesel pumping stations

View of Diesel pumping stations

BLUE SAGE ENVIRONMENTAL, INC. KENNEWICK, WA	TITLE Miles Sand & Gravel 1201 M Street SE Auburn, WA	SCALE: as shown DWN: DATE: Oct 3, 2014	DWG. NO. **Photograph 1**

USTs bedded in pea gravel

BLUE SAGE ENVIRONMENTAL, INC. KENNEWICK, WA	TITLE Miles Sand & Gravel 1201 M Street SE Auburn, WA	SCALE: as shown DWN: DATE: Oct 3, 2014	DWG. NO. **Photos 2**

Removal of inerted USTs

BLUE SAGE ENVIRONMENTAL, INC. KENNEWICK, WA	TITLE	Miles Sand & Gravel 1201 M Street SE Auburn, WA	SCALE: as shown DWN: DATE: Oct 3, 2014	DWG. NO. **Photos 3**

Floor of excavation below Diesel USTs

Floor of excavation below
Unleaded Gasoline UST

BLUE SAGE ENVIRONMENTAL, INC. KENNEWICK, WA	TITLE Miles Sand & Gravel 1201 M Street SE Auburn, WA	SCALE: as shown DWN: DATE: Oct 3, 2014	DWG. NO. **Photos 4**

Excavation around 10,000 Diesel UST
on September 12, 2014
North wall

Floor of excavation
with north wall

BLUE SAGE ENVIRONMENTAL, INC. KENNEWICK, WA	TITLE Miles Sand & Gravel 1201 M Street SE Auburn, WA	SCALE: as shown DWN: DATE: Oct 3, 2014	DWG. NO. **Photos 5**

Excavation around 10,000 Diesel UST
on September 16, 2014
North wall

North and west walls

BLUE SAGE ENVIRONMENTAL, INC. KENNEWICK, WA	TITLE Miles Sand & Gravel 1201 M Street SE Auburn, WA	SCALE: as shown DWN: DATE: Oct 3, 2014	DWG. NO. **Photos 6**

Native soils around UST location

Pebbles-Cobbles-Sand
Mixture

BLUE SAGE ENVIRONMENTAL, INC. KENNEWICK, WA	TITLE Miles Sand & Gravel 1201 M Street SE Auburn, WA	SCALE: as shown DWN: DATE: Oct 3, 2014	DWG. NO. **Photos 7**

APPENDIX A

Ecology UST Site & Tank Data Summary

Regulated Underground Storage Tanks, Active Facilities *

King County, Auburn

Site Name: MILES SAND & GRAVEL COMPANY, INC.
Alternate Name(s): MILES SAND & GRAVEL AUBURN, MILES SAND & GRAVEL COMPANY INC AUBURN, MILES SAND & GRAVEL COMPANY, INC.

Location: 1201 M ST
Auburn 98002
Resp. Unit: NORTHWEST
Lat / Long: 47.318 -122.214
Facility-Site ID: 87547247
UST Site ID: 10786

Tank Name	Tank Status	Install Date	Capacity Range	Compartment #	Substance Stored
E	Operational	3/1/1978	10,000 to 19,999 Gallons	1	B Unleaded Gasoline
M	Operational	3/1/1978	10,000 to 19,999 Gallons	1	D Diesel
W	Operational	3/1/1978	10,000 to 19,999 Gallons	1	D Diesel

RegulatedUSTs2014_ActiveFacilities

*Active Facilities have at least one tank with status of "Operational", "Deferred", "Temporarily Closed", or "Red Tag".

APPENDIX B

Miles Sand & Gravel Company
Well Log

STATE OF WASHINGTON
DEPARTMENT OF CONSERVATION
DIVISION OF WATER RESOURCES

Appl.#7075
Permit #6699

WELL LOG

Record by Driller
Source Driller's Record

Location State of WASHINGTON
County King
Area
Map
Gov't.Lot ¼ 9 ¼ sec 19 T 21 N, R 5 E

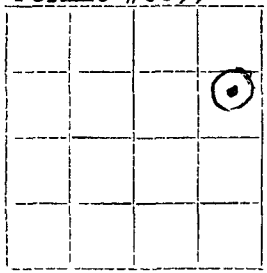
Diagram of Section

Drilling Co Johnson Drilling Co.
Address 19415 - 108th Avenue SE, Renton, Wash.
Method of Drilling Cable Date September, 1965
Owner Miles Company
Address P. O. Box 130, Auburn, Wash.
Land surface, datum ft above/below
SWL 49' Date September, 1965 Dims 10" x 110

CORRELATION	MATERIAL	From (feet)	To (feet)
	(Transcribe driller's terminology literally but paraphrase as necessary in parentheses If material water bearing so state and record static level if reported Give depths in feet below land surface datum unless otherwise indicated Correlate with stratigraphic column if feasible Following log of materials list all casings perforations screens etc.)		
	Industrial use		
	Clay, greyish, silty	0	11
	Hardpan, sand & gravel	11	40
	Sand, loose, & gravel	40	49
	Sand, water	49	55
	Hardpan, brown	55	59
	Sand, Gravel, water	59	70
	Gravel, coarse, water	70	109
	Hardpan, gravel	109	110
	Casing 10" from 0-110'		
	Screen installed from 90-110'		
	Surface sealed to 10'		
	Yield: 400 gpm with 2' DD after 4 hrs.		
	Immediate recovery		
	Test made in September, 1965		
	Pump: 60 h.p. deep well - Peerless		

Turn up Sheet of sheets

APPENDIX C

Marine Vacuum Service, Inc.
AST/UST Pump & Rinse Certificate

Marine Vacuum Service, Inc.

GENERAL CONTRACTOR

CONTRACTORS LICENSE # MARINVS097JA

P0. Box 24263 Seattle, Washington 98124

Telephone (206) 762-0240

FAX (206) 763-8084

1-800-540-7491

AST/UST STORAGE TANK PUMP & RINSE CERTIFICATE

Tank Size:	10K	10K	20K
Last Contents	Gas	Diesel	Diesel

Tank Location: 1201 M St - Miles Sand
Auburn, WA

Marine Vacuum Service, Inc. certifies that the above mentioned tank(s) have been triple rinsed in accordance with the industry standard as outlined in 40 CFR PART 280.70, WAC 173-360-380(I), API 1604, API 2015 and that all residual product and rinsate has been disposed of in accordance with Federal, State and Local regulations. Tanks listed above are **NOT GAS FREE** or **NOT SAFE FOR HOT WORK**

Tank Owner: Miles Sand

Contractor: Don Smalls
Blue Sage

M.V.S. Representative: Mike Schirmer

Date: 9-9-14

Notes:

APPENDIX D

ESN Northwest Chemistry Laboratory
Lab Report dated September 16, 2014

ESN NORTHWEST
Environmental Services Network

September 16, 2014

Alex Koch
Blue Sage Environmental
P.O. Box 6738
Kennewick, WA 99336

Dear Mr. Koch:

Please find enclosed the analytical data reports for the UST Removal Project in Auburn, Washington. Soil samples were analyzed for Diesel and Oil by NWTPH-Dx/DX Extended, Gasoline by NWTPH-Gx, and BTEX by Method 820 on September 11, 2014.

The results of the analyses are summarized in the attached tables. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. A copy of the invoice for this work is enclosed for your records.

ESN Northwest appreciates the opportunity to have provided these services to to Blue Sage Environmental for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A. Korosec

Michael A. Korosec
President

1210 Eastside Street SE, Suite 200 ■ Olympia, Washington 98501 ■ 360.459.4670 ■ FAX 360.459.3432
Web Site: *www.esnnw.com* E-Mail: *info@esnnw.com*

ESN NORTHWEST CHEMISTRY LABORATORY

Miles Sand & Gravel
UST Removal PROJECT
Auburn, WA

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Diesel Range Organics & Lube Oil Range Organics in Soil by Method NWTPH-Dx/Dx Extended

Sample Number	Date Prepared	Date Analyzed	Surrogate Recovery (%)	Diesel Range Organics (mg/kg)	Lube Oil Range Organics (mg/kg)
Method Blank	9/11/2014	9/11/2014	82	nd	nd
LCS	9/11/2014	9/11/2014	92	105%	---
MSG-SP1	9/11/2014	9/11/2014	88	**180**	nd
MSG-SP2	9/11/2014	9/11/2014	83	**1200**	nd
MSG-SP3	9/11/2014	9/11/2014	102	**2200**	nd
MSG-SP4	9/11/2014	9/11/2014	100	**2000**	nd
MSG-SP5	9/11/2014	9/11/2014	91	**270**	nd
MSG-SP5 Duplicate	9/11/2014	9/11/2014	94	**270**	nd
Reporting Limits				50	100

"---" Indicates not tested for component.
"nd" Indicates not detected at the listed detection limits.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 50% TO 150%

ESN NORTHWEST CHEMISTRY LABORATORY

Miles Sand & Gravel
UST Removal Auburn Pit PROJECT
Auburn, WA

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Diesel Range Organics & Lube Oil Range Organics in Soil by Method NWTPH-Dx/Dx Extended

Sample Number	Date Prepared	Date Analyzed	Surrogate Recovery (%)	Diesel Range Organics (mg/kg)	Lube Oil Range Organics (mg/kg)
Method Blank	9/11/2014	9/11/2014	82	nd	nd
LCS	9/11/2014	9/11/2014	92	105%	---
MSG-D20-1	9/11/2014	9/11/2014	103	nd	nd
MSG-D20-2	9/11/2014	9/11/2014	121	nd	nd
MSG-D20-3	9/11/2014	9/11/2014	96	**160**	nd
MSG-D10-1	9/11/2014	9/11/2014	129	**5500**	nd
MSG-D10-2	9/11/2014	9/11/2014	99	**710**	nd
MSG-D10-3	9/11/2014	9/11/2014	88	**660**	nd
Reporting Limits				50	100

"---" Indicates not tested for component.
"nd" Indicates not detected at the listed detection limits.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 50% TO 150%

ESN NORTHWEST CHEMISTRY LABORATORY

Miles Sand & Gravel
UST Removal PROJECT
Auburn, WA

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analyses of Gasoline Range Organics in Soil by Method NWTPH-Gx

Sample Number	Date Prepared	Date Analyzed	Surrogate Recovery (%)	Gasoline Range Organics (mg/kg)
Method Blank	9/11/2014	9/11/2014	108	nd
LCS	9/11/2014	9/11/2014	107	114%
MSG-SP1	9/10/2014	9/11/2014	115	nd
MSG-SP2	9/10/2014	9/11/2014	109	nd
MSG-SP3	9/10/2014	9/11/2014	114	nd
MSG-SP4	9/10/2014	9/11/2014	104	nd
MSG-SP5	9/10/2014	9/11/2014	116	nd
MSG-SP5 Duplicate	9/10/2014	9/11/2014	115	nd
Reporting Limits				10

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE: 65% TO 135%

ESN NORTHWEST CHEMISTRY LABORATORY

Miles Sand & Gravel
UST Removal Auburn Pit PROJECT
Auburn, WA

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analyses of Gasoline Range Organics in Soil by Method NWTPH-Gx

Sample Number	Date Prepared	Date Analyzed	Surrogate Recovery (%)	Gasoline Range Organics (mg/kg)
Method Blank	9/11/2014	9/11/2014	108	nd
LCS	9/11/2014	9/11/2014	107	114%
MSG-G10-1	9/10/2014	9/11/2014	108	nd
MSG-G10-2	9/10/2014	9/11/2014	116	nd
MSG-G10-3	9/10/2014	9/11/2014	117	nd
Reporting Limits				10

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE: 65% TO 135%

ESN NORTHWEST CHEMISTRY LABORATORY

Miles Sand & Gravel
UST Removal PROJECT
Auburn, WA

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analyses of BTEX (EPA Method 8260) in Soil

Sample Number	Date Prepared	Date Analyzed	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Surrogate Recovery (%)
Method Blank	9/11/2014	9/11/2014	nd	nd	nd	nd	106
LCS	9/11/2014	9/11/2014	104%	101%	98%	92%	111
LCSD	9/11/2014	9/11/2014	85%	85%	80%	79%	107
MSG-SP1	9/10/2014	9/11/2014	nd	nd	nd	nd	113
MSG-SP2	9/10/2014	9/11/2014	nd	nd	nd	nd	107
MSG-SP3	9/10/2014	9/11/2014	nd	nd	nd	nd	112
MSG-SP4	9/10/2014	9/11/2014	nd	nd	nd	nd	102
MSG-SP5	9/10/2014	9/11/2014	nd	nd	nd	nd	114
MSG-SP5 Duplicate	9/10/2014	9/11/2014	nd	nd	nd	nd	113
Method Detection Limits			0.02	0.05	0.05	0.15	

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (4-Bromofluorobenzene) & LCS : 65% TO 135%

ESN NORTHWEST CHEMISTRY LABORATORY

Miles Sand & Gravel
UST Removal Auburn Pit PROJECT
Auburn, WA

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analyses of BTEX (EPA Method 8260) in Soil

Sample Number	Date Prepared	Date Analyzed	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Surrogate Recovery (%)
Method Blank	9/11/2014	9/11/2014	nd	nd	nd	nd	106
LCS	9/11/2014	9/11/2014	104%	101%	98%	92%	111
LCSD	9/11/2014	9/11/2014	85%	85%	80%	79%	107
MSG-D20-1	9/10/2014	9/11/2014	nd	nd	nd	nd	111
MSG-D20-2	9/10/2014	9/11/2014	nd	nd	nd	nd	108
MSG-D20-3	9/10/2014	9/11/2014	nd	nd	nd	nd	113
MSG-D10-1	9/10/2014	9/11/2014	nd	nd	nd	nd	119
MSG-D10-2	9/10/2014	9/11/2014	nd	nd	nd	nd	109
MSG-D10-3	9/10/2014	9/11/2014	nd	nd	nd	nd	109
MSG-G10-1	9/10/2014	9/11/2014	nd	nd	nd	nd	106
MSG-G10-2	9/10/2014	9/11/2014	nd	nd	nd	nd	111
MSG-G10-3	9/10/2014	9/11/2014	nd	nd	nd	nd	115
Method Detection Limits			0.02	0.05	0.05	0.15	

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (4-Bromofluorobenzene) & LCS : 65% TO 135%

ESN NORTHWEST, INC. Environmental Services Network

S140911.1

CHAIN-OF-CUSTODY RECORD

CLIENT: MILES SAND & GRAVEL (BSE)

ADDRESS: 400 Valley Ave NE PUYALLUP 98372

PHONE: (253) 833-3705 FAX:

ATTN: MIKE SCHLIH

CLIENT PROJECT #: PROJECT MANAGER: AHK

DATE: 9-10-14 PAGE OF

PROJECT NAME: UST REMOVAL

LOCATION: AUBURN PIT

COLLECTOR: AKOCH DATE OF COLLECTION 9/10/14

Sample Number	Depth	Time	Sample Type	Container Type	TPH-HCID	TPH - DIESEL & OIL	TPH - GASOLINE	BTEX	VOC 8260/CL	VOC 8260	SemiVol 8270	PAH's 8270	PCB's 8082	CL Pesticides 8081	RCRA 8 Metals	MTCA 5 Metals	Pb	Asbestos-PLM	GRO Suite	DRO Suite	WO Suite	NOTES	Total Number of Containers	Laboratory Note Number
1. MSG-D20-1	15		Soil	4oz/40A		X		X														24hr	3	
2. MSG-D20-2	15					X		X														24hr	3	
3. MSG-D20-3	15					X		X														24hr	3	
4. MSG-D10-1	12					X		X														24hr	3	
5. MSG-D10-2	12					X		X														24hr	3	
6. MSG-D10-3	12					X		X														24hr	3	
7. MSG-G10-1	14						X	X														24hr	3	
8. MSG-G10-2	14						X	X														24hr	3	
9. MSG-G10-3	14						X	X														24hr	3	
10. MSG-SP1						X	X	X														5day	3	
11. MSG-SP2						X	X	X														5day	3	
12. MSG-SP3						X	X	X														5day	3	
13. MSG-SP4						X	X	X														5day	3	
14. MSG-SP5						X	X	X														5day	3	
15.																								
16.																								
17.																								
18.																								

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
[signature]	9/11/14 8:55	[signature]	9/11/14 855
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ ESN DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

24hr 1 - 9

5day 10 - 14

Turn Around Time: 24 HR 48 HR 5 DAY

APPENDIX E

ESN Northwest Chemistry Laboratory
Lab Report dated September 16, 2014

ESN NORTHWEST
Environmental
Services Network

September 16, 2014

Alex Koch
Blue Sage Environmental
P.O. Box 6738
Kennewick, WA 99336

Dear Mr. Koch:

Please find enclosed the analytical data reports for the Auburn Pit-UST's Project in Auburn, Washington. Soil samples were analyzed for Diesel and Oil by NWTPH-Dx/DX Extended on September 12, 2014.

The results of the analyses are summarized in the attached tables. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. A copy of the invoice for this work is enclosed for your records.

ESN Northwest appreciates the opportunity to have provided these services to to Blue Sage Environmental for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A. Korosec

Michael A. Korosec
President

1210 Eastside Street SE, Suite 200 ■ Olympia, Washington 98501 ■ 360.459.4670 ■ FAX 360.459.3432
Web Site: *www.esnnw.com* E-Mail: *info@esnnw.com*

ESN NORTHWEST CHEMISTRY LABORATORY

Miles Sand & Gravel
Auburn Pit-USTs PROJECT
Auburn, WA

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Diesel Range Organics & Lube Oil Range Organics in Soil by Method NWTPH-Dx/Dx Extended

Sample Number	Date Prepared	Date Analyzed	Surrogate Recovery (%)	Diesel Range Organics (mg/kg)	Lube Oil Range Organics (mg/kg)
Method Blank	9/12/2014	9/12/2014	86	nd	nd
LCS	9/12/2014	9/12/2014	86	104%	---
D10-Floor E	9/12/2014	9/12/2014	91	**1300**	nd
D10-Floor W	9/12/2014	9/12/2014	83	nd	nd
N Wall East	9/12/2014	9/12/2014	94	**2900**	nd
N Wall Ctr	9/12/2014	9/12/2014	105	**5300**	nd
N Wall West	9/12/2014	9/12/2014	93	**170**	nd
S Wall East	9/12/2014	9/12/2014	83	nd	nd
S Wall West	9/12/2014	9/12/2014	86	nd	nd
S Wall West dup	9/12/2014	9/12/2014	86	nd	nd
Reporting Limits				50	100

"---" Indicates not tested for component.
"nd" Indicates not detected at the listed detection limits.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 50% TO 150%

ESN NORTHWEST, INC. | Environmental Services Network

S1409121

CHAIN-OF-CUSTODY RECORD

CLIENT: Miles Sand & Gravel

ADDRESS:

PHONE: FAX:

CLIENT PROJECT #: PROJECT MANAGER: AKoch

DATE: 9-12-14 PAGE OF

PROJECT NAME: Auburn Pit - UST's

LOCATION: Auburn

COLLECTOR: AHK DATE OF COLLECTION 9/12/14

Sample Number	Depth	Time	Sample Type	Container Type	TPH-HCID	TPH - DIESEL & OIL	TPH - GASOLINE	BTEX	VOC 8260CL	VOC 8260	SemiVol 8270	PAH's 8270	PCB's 8082	CL Pesticides 8081	RCRA 8 Metals	MTCA 5 Metals	Pb	Asbestos-PLM	GRO Suite	DRO Suite	WO Suite	NOTES	Total Number of Containers	Laboratory Note Number
1. D10-Floor E	28	1030	Soil	4oz	X																		1	
2. D10-Floor W	28	1035			X																		1	
3. N Wall - East	20	1040			X																		1	
4. N Wall - Ctr	20	1045			X																		1	
5. N Wall - West	20	1050			X																		1	
6. S Wall - East	20	1055			X																		1	
7. S Wall - West	20	1100			X																		1	
8.																								
9.																								
10.																								
11.																								
12.																								
13.																								
14.																								
15.																								
16.																								
17.																								
18.																								

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
	9/12/14 1:10		9/12/14 1:10
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ ESN DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

Turn Around Time: (24 HR) 48 HR 5 DAY

APPENDIX F

ESN Northwest Chemistry Laboratory
Lab Report dated September 23, 2014

ESN NORTHWEST
Environmental
Services Network

September 23, 2014

Alex Koch
Blue Sage Environmental
P.O. Box 6738
Kennewick, WA 99336

Dear Mr. Koch:

Please find enclosed the analytical data reports for the Auburn Pit-UST's Project in Auburn, Washington. Soil samples were analyzed for Diesel and Oil by NWTPH-Dx/DX Extended on September 16, 2014.

The results of the analyses are summarized in the attached tables. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. A copy of the invoice for this work is enclosed for your records.

ESN Northwest appreciates the opportunity to have provided these services to to Blue Sage Environmental for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A Korosec

Michael A. Korosec
President

1210 Eastside Street SE, Suite 200 ■ Olympia, Washington 98501 ■ 360.459.4670 ■ FAX 360.459.3432
Web Site: *www.esnnw.com* E-Mail: *info@esnnw.com*

ESN NORTHWEST CHEMISTRY LABORATORY

Miles Sand & Gravel
AUBURN PIT UST REMOVAL
Auburn, WA

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Diesel Range Organics & Lube Oil Range Organics in Soil by Method NWTPH-Dx/Dx Extended

Sample Number	Date Prepared	Date Analyzed	Surrogate Recovery (%)	Diesel Range Organics (mg/kg)	Lube Oil Range Organics (mg/kg)
Method Blank	9/16/2014	9/16/2014	78	nd	nd
LCS	9/16/2014	9/16/2014	99	87%	---
NWall- East2	9/16/2014	9/16/2014	131	nd	nd
NWall- Ctr2	9/16/2014	9/16/2014	100	nd	nd
East Wall-S End	9/16/2014	9/16/2014	93	nd	nd
S Wall-Ctr	9/16/2014	9/16/2014	84	nd	nd
S Wall- W End	9/16/2014	9/16/2014	75	nd	nd
S Wall- W End Duplicate	9/16/2014	9/16/2014	93	nd	nd
Reporting Limits				50	100

"---" Indicates not tested for component.
"nd" Indicates not detected at the listed detection limits.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 50% TO 150%

ESN NORTHWEST, INC. Environmental Services Network

S1409l6.S

CHAIN-OF-CUSTODY RECORD

CLIENT: MILES SAND & GRAVEL (BSE)

ADDRESS: PUYALLUP

PHONE: _____ FAX: _____

CLIENT PROJECT #: _____ PROJECT MANAGER: ALTOCH

DATE: 9-16-2014 PAGE 1 OF 1

PROJECT NAME: MILES S & G

LOCATION: AUBURN

COLLECTOR: AHK DATE OF COLLECTION 9/16/14

Sample Number	Depth	Time	Sample Type	Container Type	TPH-HCID	TPH - DIESEL & OIL	TPH - GASOLINE	BTEX	VOC 8260C/L	VOC 8260	Semivol 8270	PAH's 8270	PCB's 8082	CL Pesticides 8081	RCRA 8 Metals	MTCA 5 Metals	Pb	Asbestos-PLM	GRO Suite	DRO Suite	WO Suite	NOTES	Total Number of Containers	Laboratory Note Number
1. NWall-East 2	25	800	Soil	4oz		X																		
2. NWall-Ctr 2	25	815				X																		
3. EastWall -	25	1300				X																		
4. SEND																								
5. SWall-Ctr	25	1330				X																		
6. SWall-West	25	1350				X																		
7.																								
8.																								
9.																								
10.																								
11.																								
12.																								
13.																								
14.																								
15.																								
16.																								
17.																								
18.																								

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
	9/16/14 1440		9/16/14 1440
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ ESN DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

Turn Around Time: (24 HR) 48 HR 5 DAY

APPENDIX G

ESN Northwest Chemistry Laboratory
Lab Report dated September 30, 2014

ESN NORTHWEST
Environmental
Services Network

September 30, 2014

Alex Koch
Blue Sage Environmental
P.O. Box 6738
Kennewick, WA 99336

Dear Mr. Koch:

Please find enclosed the analytical data reports for the UST Removal Project in Auburn, Washington. Soil samples were analyzed for Diesel and Oil by NWTPH-Dx/Dx Extended on September 24, 2014.

The results of the analyses are summarized in the attached tables. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. A copy of the invoice for this work is enclosed for your records.

ESN Northwest appreciates the opportunity to have provided these services to to Blue Sage Environmental for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A Korosec

Michael A. Korosec
President

1210 Eastside Street SE, Suite 200 ■ Olympia, Washington 98501 ■ 360.459.4670 ■ FAX 360.459.3432
Web Site: *www.esnnw.com* E-Mail: *info@esnnw.com*

ESN NORTHWEST CHEMISTRY LABORATORY

Miles Sand & Gravel
UST Removal PROJECT
Auburn, WA

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Diesel Range Organics & Lube Oil Range Organics in Soil by Method NWTPH-Dx/Dx Extended

Sample Number	Date Prepared	Date Analyzed	Surrogate Recovery (%)	Diesel Range Organics (mg/kg)	Lube Oil Range Organics (mg/kg)
Method Blank	9/24/2014	9/24/2014	90	nd	nd
LCS	9/24/2014	9/24/2014	112	69%	---
MSG-SP6	9/24/2014	9/24/2014	110	nd	**470**
MSG-SP7	9/24/2014	9/24/2014	101	nd	nd
MSG-SP8	9/24/2014	9/24/2014	95	nd	nd
MSG-SP9	9/24/2014	9/24/2014	117	**130**	nd
MSG-SP10	9/24/2014	9/24/2014	105	**110**	nd
MSG-SP11	9/24/2014	9/24/2014	111	**960**	nd
MSG-SP12	9/24/2014	9/24/2014	95	nd	nd
MSG-Sp12 Duplicate	9/24/2014	9/24/2014	111	nd	nd
Reporting Limits				50	100

"---" Indicates not tested for component.
"nd" Indicates not detected at the listed detection limits.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 50% TO 150%

ESN NORTHWEST, INC. Environmental Services Network

S140924.3

CHAIN-OF-CUSTODY RECORD

CLIENT: MILES SAND & GRAVEL

ADDRESS: PUYALLUP

PHONE: _____ FAX: _____

CLIENT PROJECT #: _____ PROJECT MANAGER: AKOCH

DATE: 9-24-14 PAGE 1 OF 1

PROJECT NAME: UST REMOVAL

LOCATION: AUBURN

COLLECTOR: AHK DATE OF COLLECTION 9/24/14

Sample Number	Depth	Time	Sample Type	Container Type	TPH-HCID	TPH - DIESEL & OIL	TPH - GASOLINE	BTEX	VOC 8260CL	VOC 8260	SemiVol 8270	PAH's 8270	PCB's 8082	CL Pesticides 8081	RCRA 8 Metals	MTCA 5 Metals	Pb	Asbestos-PLM	GRO Suite	DRO Suite	HFO Suite	NOTES	Total Number of Containers	Laboratory Note Number
1. MSG-SP6		0900	Soil	4oz	X																		1	
2. " -SP7		"	"	"	X																		1	
3. " -SP8		"	"	"	X																		1	
4. " -SP9		"	"	"	X																		1	
5. " -SP10		"	"	"	X																		1	
6. " -SP11		"	"	"	X																		1	
7. " -SP12		0915	"	"	X																		1	
8.																								
9.																								
10.																								
11.																								
12.																								
13.																								
14.																								
15.																								
16.																								
17.																								
18.																								

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
[signature]	9/24/14	[signature]	9/24/14 1440
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ ESN DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

Turn Around Time: (24 HR) 48 HR 5 DAY